REMARKS

Claims 1-6 are all the claims pending in the application. Claims 1 and 3-5 stand rejected. Claims 2 and 6 are allowed. Claim 1 is amended. New claim 7 is added.

Claim Rejections - 35 U.S.C. § 102

Claims 1 and 3-5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lee et al (6,326,826). This rejection is traversed for at least the following reasons.

Claim 1

Claim 1 is the only independent claim under rejection. Accordingly, it is being discussed separately from the rejection of the dependent claims.

No Continuously Spread Spectrum

In the *Response to Arguments* section of the Office Action at pages 4 and 5, the Examiner states that he disagrees with the Applicant's statement that there is no mention in Lee et al of a continuous spread spectrum system. The Examiner asserts that the phase control means [11, 12, 13, 14, 15 and 19'] varies a setting condition to spread a spectrum of the phase controlled clock outputted at the output. The Examiner states that inherently the spectrum must be continuous, or else there is no spectrum.

First, Applicants respectfully submit that the Examiner has misunderstood Applicants' arguments. The point of the amendment and the argument is that the spreading is not a continuous operation, but conducted in starts and stops.

Second, as stated in the claim, the phase control means "varies a setting condition to continuously spread a spectrum." This language states a continuous operation in a temporal sense and not in a frequency or spectrum sense. Since this language is confusing to the Examiner, Applicants have amended claim 1 to state that the phase control means "operates continuously."

Third, this feature is not taught in Lee et al. As noted, the operation in Lee et al is not continuous. In Lee et al, the first charge pump 15 is used for removing remaining phase error. The first charge pump 15 is not relevant to an operation of the loop during realization of locking of frequency, as explained at column 2, lines 63 to 65 of the patent. Moreover, the first charge pump 15 is used for removing remaining phase error, and it is not used for effecting the spread of spectrum by modulating the clock. As explained at col. 3, lines 1-5, once frequency lock is achieved and the charge pump 15 is engaged, the phased detector and charge pump finely tune out the remaining phase error between the reference clock and the clock CK[7]. Thus, it does not continually contribute to spread spectrum, as in the present invention. In other words, it does not act to vary a setting condition to continuously spread a spectrum.

The Examiner is respectfully requested to acknowledge the difference and to suggest other language if the present text is not clear enough.

No Spread Spectrum Effect

In the Response to Arguments section of the Office Action at page 5, the Examiner again states that he disagrees with the Applicant's statement that there is no mention in Lee et al of a manner of achieving spread spectrum. First, the Examiner assets that the MPEP (2163.02) permits the art to teach the invention without using the specific terms in the claim (i.e., in *haec verba*). Second, the Examiner points to the illustrated circuit in Fig. 1 and the teachings at col. 2, lines 44-51 for a disclosure of the phase control means [11, 12, 13, 14, 15 and 19] varying a setting condition to spread the spectrum of the phase controlled clock outputted at the output to achieve spread spectrum.

Applicants respectfully submit that the Examiner cannot assume that any modulation of the reference clock signal will accomplish some measure of spread spectrum because, as already noted, Lee is focused only on removing remaining phase error and not for continuously effecting a spread spectrum by modulating the clock, as previously noted with regard to the disclosure at col. 2, lines 63-65. This is not relevant to spread spectrum.

Unique Manner of Forming Spread Spectrum

The Examiner notes at page 5 of the Office Action that Applicant brings up a unique manner for forming a spread spectrum, which is not set forth in the claims. Applicants would respectfully disagree.

Applicants submit that the present application teaches a unique manner in which the operational state of the variable delay circuit 2, namely, the phase difference of the modulated clock to the reference clock created by the delay is detected, and the way the delay setting circuit 11 varies the setting for generating the input control voltage to the variable delay circuit that generates the spectrum spread modulation clock according to the detected result of the phase difference. In particular, as stated at pages 16-17, the delay setting circuit 11 instructs the second charge pump 12 to take out the charge DQ corresponding to Dt, so as to give the control voltage DV required for delaying the phase and changing the clock cycle by Dt to the variable delay circuit 2 as the control input.

Claims 3-5 and 7

Applicants respectfully note that the unique manner of forming spread spectrum is detailed in the dependent claims 3-5 and in new claim 7. As to claims 3-5, the Examiner merely asserts that the limitations are taught in or inherent in the structure of Lee et al. However, Applicants would respectfully submit that the claims specify this unique feature. Applicants also would submit that the Examiner has not demonstrated how and why these limitations are actually met on the basis of the disclosure of Lee et al. By contrast, the subject matter limited in claims 3 is supported by the expression as set forth at page 10, line 11 to page 11, line 22" of the specification, namely the former corresponds to the latter, and such an expression in not disclosed in the cited art, i.e. Lee et al. In the absence of a specific teaching of these limitations, the claims cannot be anticipated or rendered obvious.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Alan J. Kasper/

Alan J. Kasper
Registration No. 25,426

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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